

II. LISTING OF THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A computer implemented method for matching commodity suppliers with intending purchasers, the method comprising the steps of:

obtaining supply information including a plurality of supply quantities and a supply price that for each supply quantity ~~that~~ indicates a supply cost from at least one commodity supplier for a particular commodity item and arranging the information into a supply list for storage in a database, wherein the supply price lowers as the supply quantity increases, and wherein each supply quantity is classified into a plurality of supply quantity ranges that indicate a maximum supply quantity range for each commodity supplier;

receiving purchase wish information including a desired purchase price and a desired purchase quantity for said particular commodity item from intending purchasers through a network for a predetermined period of time;

storing the received purchase wish information in said database;

after said predetermined period of time, collecting said purchase wish information stored in said database and producing a purchase wish list having the information arranged in a predetermined order;

selecting an optimum combination of intending purchasers, selling quantities, selling prices, commodity suppliers, supply quantities, and supply prices by comparing only the desired purchase price and the desired purchase quantity of said purchase wish list with the supply price

and supply quantity of said supply list by calculating a total profit using an iterative aggregation of profit for each additional intending purchaser; and

transmitting a purchase admission notification to the intending purchasers selected in said selecting step,

wherein an intending purchaser who bids lower than the supply price for the particular supply quantity is not automatically disqualified.

2. (Currently amended) The method according to claim 1, wherein the ~~supply quantities in said supply list are classified into a~~ plurality of supply quantity ranges each have~~ing~~ a same predetermined span, and one or more corresponding supply prices are indicated for each of said supply quantities for use in a single instance of the selecting step.

3. (Original) The method according to claim 2, wherein said purchase wish list is arranged such that said desired purchase prices are placed in descending order from highest to lowest.

4. (Previously Presented) The method according to claim 3, wherein said selecting step selects the optimum combination so that gross profit of said seller is maximized, the selecting step further comprising:

determining a first value by summing a product of the desired purchase price and the desired purchase quantity for each transaction;

determining a second value by summing the purchase quantity for each transaction;

determining a third value by multiplying the second value and the supply price corresponding to the supply quantity range in the supply list that includes the second value; and calculating the gross profit by subtracting the third value from the first value.

5. (Original) The method according to claim 4, wherein said selecting step comprises the steps of:

accumulating the desired purchase quantities by referring to said purchase wish list; checking within which supply quantity range in said supply list the accumulation result falls and determining a minimum supply price within the corresponding supply quantity range; and

calculating an aggregate gross profit using the determined supply price, wherein said accumulating step, said checking step, and said calculating step are repeated for all the purchase wish information in the purchase wish list, and intending purchasers up to the one corresponding to an iteration, in which the maximum aggregate gross profit has been obtained, are admitted to purchase.

6. (Currently Amended) A commodity sales system comprising:

a database storing, in a supply list, information about plurality of supply quantities and a supply price that for each supply quantity ~~that~~ indicates a supply cost obtained from at least one commodity supplier for the particular commodity item, wherein the supply price lowers as the supply quantity increases, and wherein each supply quantity is classified into a supply quantity range indicating a maximum supply quantity range for each commodity supplier;

means for receiving purchase wish information including a desired purchase price and a desired purchase quantity for said particular commodity item from intending purchasers through a network for a predetermined period of time, and storing the received purchase wish information in said database;

means for collecting said purchase wish information stored in said database and producing a purchase wish list having said information arranged in a predetermined order after said predetermined period of time;

means for selecting an optimum combination of intending purchasers, selling quantities, selling prices, commodity suppliers, supply quantities, and supply prices by comparing only the desired purchase price and the desired purchase quantity of said purchase wish list with the supply price and supply quantity of said supply list; and

means for transmitting a purchase admission notification to the intending purchasers selected by said selecting means.

7. (Currently amended) The system according to claim 6, wherein the ~~supply quantities in said supply list are classified, for use in a single instance of the selecting step, into a~~ plurality of supply quantity ranges each have~~[[ing]]~~ a same predetermined span, and one or more corresponding supply prices are indicated for each of said supply quantities for use in a single instance of the selecting step.

8. (Original) The system according to claim 6, wherein said purchase wish list is arranged such that said desired purchase prices are placed in descending order from highest to lowest.

9. (Previously Presented) The system according to claim 8, wherein said selecting means selects the optimum combination so that the gross profit of said seller is maximized, wherein the selecting means:

determines a first value by summing a product of the desired purchase price and the desired purchase quantity for each transaction;

determines a second value by summing the purchase quantity for each transaction;

determines a third value by multiplying the second value and the supply price corresponding to the supply quantity range in the supply list that includes the second value; and calculates the gross profit by subtracting the third value from the first value.

10. (Original) The system according to claim 9, wherein said selecting means comprises:

means for accumulating the desired purchase quantities by referring to said purchase wish list;

means for checking within which supply quantity range in said supply list the accumulation result falls and determining a minimum supply price within the corresponding supply quantity range; and

means for calculating an aggregate gross profit using the determined supply price, wherein said accumulating means, said checking means, and said calculating means repeat accumulation, checking, and calculation, respectively, for all purchase wish information included in said purchase wish list, and intending purchasers up to one corresponding to an iteration, in which maximum aggregate gross profit has been obtained, are admitted to purchase.